

## CLAIMS

1. In a process for producing a filter catalyst, the process comprising:

a step of preparing a coating slurry in which an inorganic oxide powder is dispersed, and coating the coating slurry onto a catalyst-support substrate composed of a porous material having a plurality of cells extending in the axial direction;

a step of removing the coating slurry in excess from the catalyst-support substrate with the coating slurry coated; and

a step of drying-calcining the coating slurry;

the process for producing a filter catalyst being characterized in that the removing of the coating slurry in excess is carried out by performing the following steps repeatedly:

a step of holding one of the axial opposite ends of the catalyst-support substrate and another axial opposite end thereof in such a state that a pressure difference is given therebetween; and

a step of holding the one of the opposite ends of the catalyst-support substrate and the other opposite end thereof in an identical pressure state.

2. The process for producing a filter catalyst set forth in claim 1, wherein the pressure difference given between the both opposite ends of said catalyst-support substrate is 1 KPa or more in the step of holding the both opposite ends of the catalyst-support substrate in such a state that a pressure difference is given therebetween.

3. The process for producing a filter catalyst set forth in claim 1, wherein said inorganic oxide powder dispersed in said coating slurry is such that a 70% particle-diameter value (D70) of a particle-diameter cumulative distribution is 1  $\mu\text{m}$  or less.